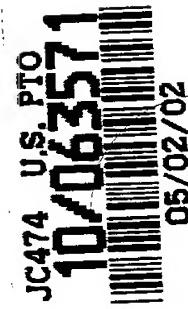


**Electronic Filing System (EFS) Data
Electronic Patent Application Submission
USPTO Use Only**

EFS ID: 14956
Application ID: 10063571
Title of Invention: Polarization Multiplexed Optical Clock
First Named Inventor: Hemonth Rao
Domestic/Foreign Application: Domestic Application
Filing Date: null
Effective Receipt Date: 2002-05-02 
Submission Type: Utility Patent Filing
Filing Type: new-utility
Confirmation Number: 0
Attorney Docket Number: PTX-033
Digital Certificate Holder: cn=Kurt Rauschenbach, ou=Registered Attorneys, ou=Patent and Trademark Office, ou=Department of Commerce, o=U.S. Government, c=US
Certificate Message Digest: JkZKwWELu2+Nvvl1Y9SP+w==
Total Fees Authorized: \$673.0

Payment Category: DA – Deposit Account
Deposit Account Number: 501211
Deposit Account Name: Kurt Rauschenbach

TRANSMITTAL FORM



Electronic Version 1.0.3

Stylesheet Version: 1.0

Attorney Docket
Number:

PTX-
033

Submission Type: Utility Patent
Filing

Polarization Multiplexed Optical Clock

First Named Inventor: Hemonth Rao

SUBMITTED BY

Name: Dr. Kurt Rauschenbach
Registration Number: 40,137
Electronic Signature Mark: kr Date Signed: 20020502

I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.

I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.

Attached Files:

declaration	ptx033dec.tif
small-entity	ptx033-se.tif
specification	PTX-033.xml
fee-transmittal	EFSfee.xml
bibd-transmittal	EFSapds.xml

Attached Image File(s):

ptx033dec.tif

ptx033-se.tif

Comments:

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)**Title of Invention****POLARIZATION MULTIPLEXED OPTICAL CLOCK**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

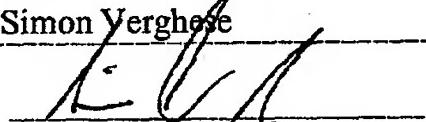
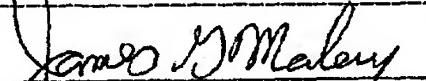
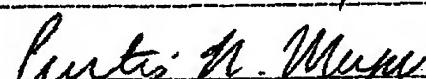
- The attached application, or
 Application No. _____, filed on _____;
 as amended on _____ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF INVENTOR(S)Inventor one: Hemonth RaoSignature: Citizen of: USAInventor two: Simon VergheseSignature: Citizen of: USAInventor three: James G. MaloneySignature: Citizen of: USAInventor four: Curtis MenyukSignature: Citizen of: USA Additional inventors are being named on _____ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(c))—SMALL BUSINESS CONCERN**Docket Number (Optional)
PTX-033Applicant/Patentee or Identifier: Hemonth Rao, et al.Application or Patent No.: Unassigned

Filed or Issued:

Title: POLARIZATION MULTIPLEXED OPTICAL CLOCK

I hereby state that I am:

- the owner of the small business concern identified below.
- an official of the small business concern empowered to act on behalf of the concern identified below.

NAME OF SMALL BUSINESS CONCERN AXE, INC.ADDRESS OF SMALL BUSINESS CONCERN 200 MetroWest Technology Drive, Maynard, MA 01754

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- the specification filed herewith with title as listed above.
- the application identified above.
- the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual concern or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- no such person, concern, or organization exists.
- each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Katherine L. HallTITLE OF PERSON IF OTHER THAN OWNER Chief Technology OfficerADDRESS OF PERSON SIGNING 200 MetroWest Technology Drive, Maynard, MA 01754SIGNATURE Katherine L. HallDATE 4/3/02

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

FEE TRANSMITTAL

Electronic Version 1.1.0

Stylesheet Version: 1.0

Patent fees are subject to annual revisions on or about October 1st of each year.

Small Entity

Small Business Concern

TOTAL FEES AUTHORIZED: \$ 673

The commissioner is hereby authorized to charge indicated processing and/or publication fees and credit any overpayments to:

Deposit Account Number: 501211



Deposit Account Name: Kurt Rauschenbach Law Office

Charge Any Additional Fee Required Under 37 C.F.R. Sections 1.16 and 1.17.

SUBMITTED BY

Authorized Name: Kurt Rauschenbach

Electronic Signature Mark: kr

Date Signed: 20020502

BASIC FILING FEE

Fee Description	Fee Code	Fee Paid
Utility Filing Fee	201	\$ 370

Subtotal For Basic Filing Fee: \$ 370

EXTRA CLAIM FEES

	Fee Code	Fee	Extra Claims	Fee Paid
Total Claims: 49	203	\$ 9	29	\$ 261
Independent Claims: 4	202	\$ 42	1	\$ 42

Subtotal For Extra Claims Fees: \$ 303